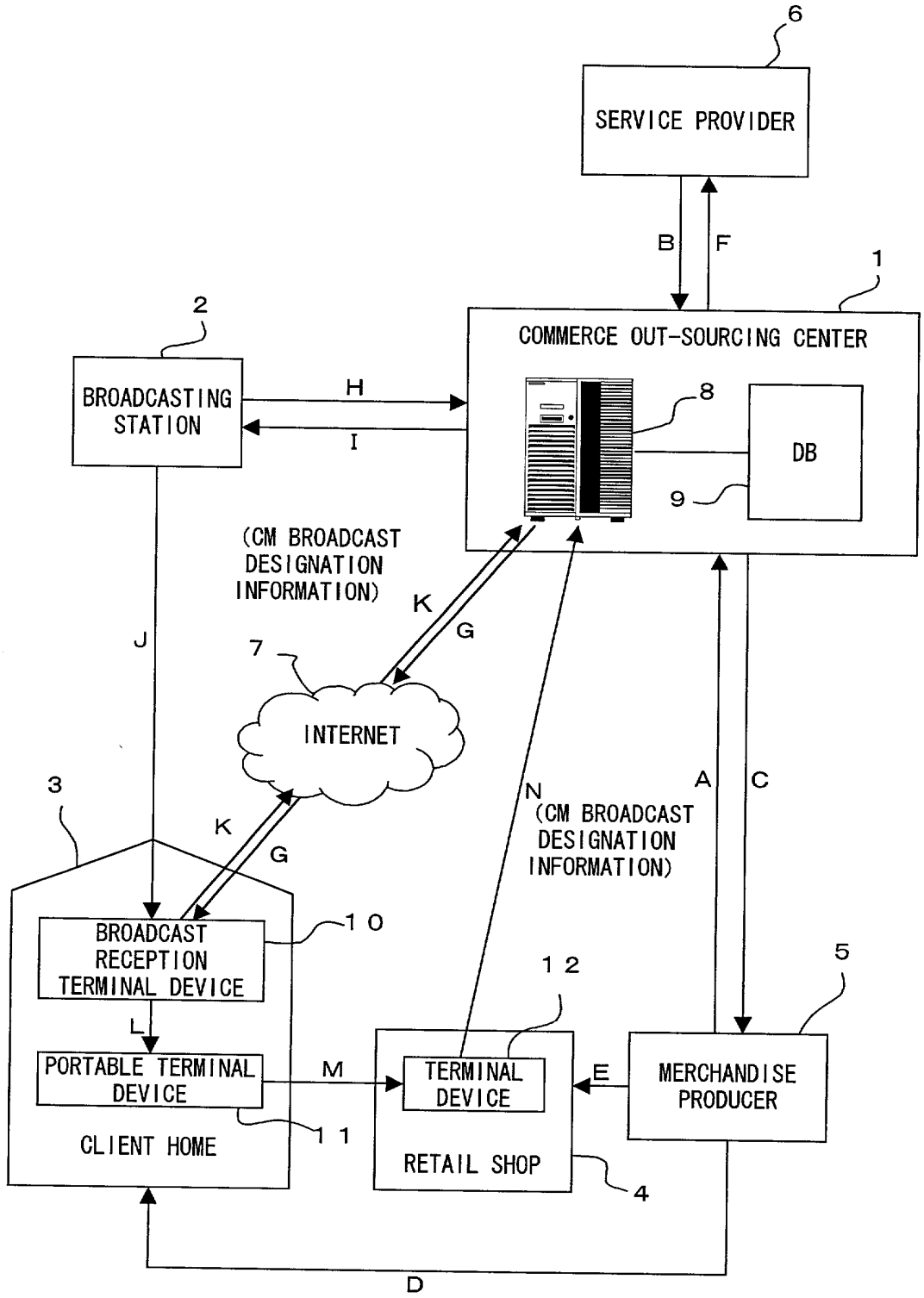

6
SERVICE PROVIDER
B
F
1
COMMERCE OUT-SOURCING CENTER
2
BROADCASTING STATION
H
I
8
DB
9
(CM BROADCAST DESIGNATION INFORMATION)
K
G
J
7
INTERNET
3
K
G
A
C
N
(CM BROADCAST DESIGNATION INFORMATION)
10
BROADCAST RECEPTION TERMINAL DEVICE
12
5
L
PORTABLE TERMINAL DEVICE
M
TERMINAL DEVICE
E
MERCHANDISE PRODUCER
11
CLIENT HOME
RETAIL SHOP
4
D

FIG. 1

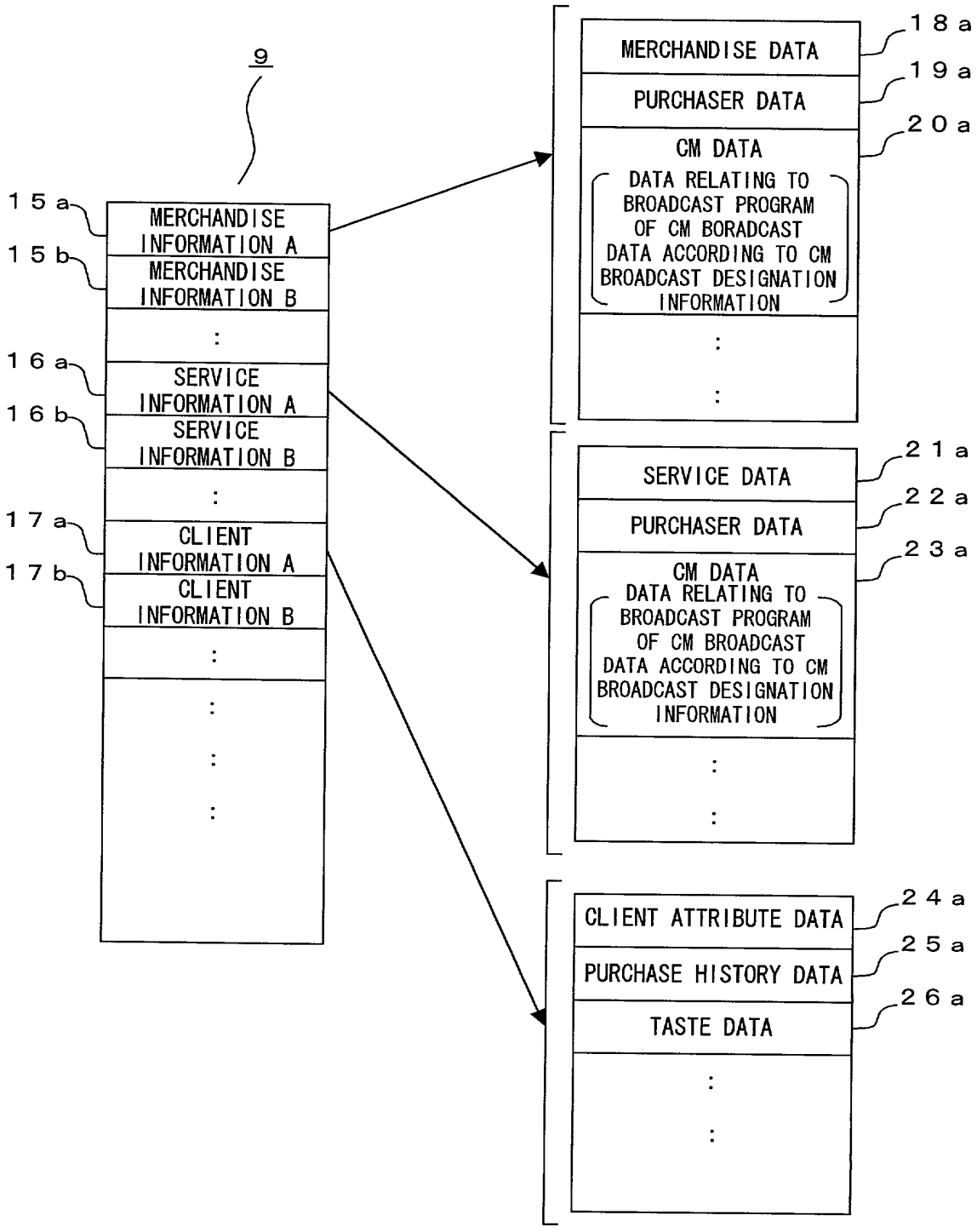

9
15a
MERCHANDISE INFORMATION A
15b
MERCHANDISE INFORMATION B
:
16a
SERVICE INFORMATION A
16b
SERVICE INFORMATION B
:
17a
CLIENT INFORMATION A
17b
CLIENT INFORMATION B
:
:
:
:
MERCHANDISE DATA
18a
PURCHASER DATA
19a
CM DATA
20a
DATA RELATING TO BROADCAST PROGRAM OF CM BORADCAST DATA ACCORDING TO CM BROADCAST DESIGNATION INFORMATION
:
:
SERVICE DATA
21a
PURCHASER DATA
22a
CM DATA
23a
DATA RELATING TO BROADCAST PROGRAM OF CM BROADCAST DATA ACCORDING TO CM BROADCAST DESIGNATION INFORMATION
:
:
CLIENT ATTRIBUTE DATA
24a
PURCHASE HISTORY DATA
25a
TASTE DATA
26a
:
:

FIG. 2

```
<product>
        <name>A beer</name>
        <no>975357</no>
        <type>6bottles</type>
        <¥price> 1800</¥price>
        <characteristic>
          <taste>very bitter</taste>
          <degree>4%</degree>
          <material>hop, malt</material>
          <image src="image/Abeer.jpg"/>
        <characteristic>
</product>
```

FIG. 3

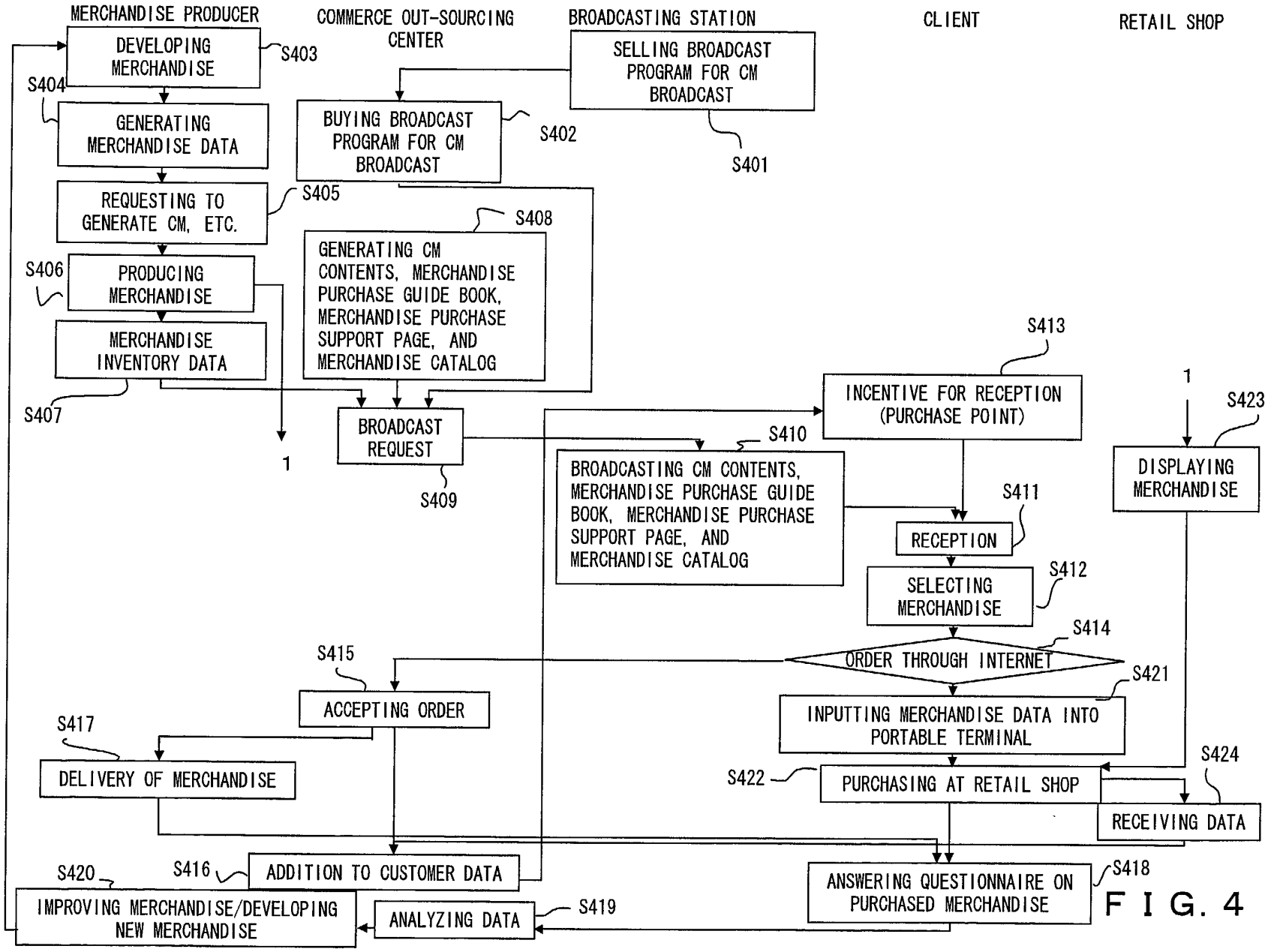

MERCHANDISE PRODUCER
COMMERCE OUT-SOURCING CENTER
BROADCASTING STATION
CLIENT
RETAIL SHOP
DEVELOPING MERCHANDISE
S403
S404
GENERATING MERCHANDISE DATA
REQUESTING TO GENERATE CM, ETC.
S405
S406
PRODUCING MERCHANDISE
MERCHANDISE INVENTORY DATA
S407
1
BUYING BROADCAST PROGRAM FOR CM BROADCAST
S402
SELLING BROADCAST PROGRAM FOR CM BROADCAST
S401
S408
GENERATING CM CONTENTS, MERCHANDISE PURCHASE GUIDE BOOK, MERCHANDISE PURCHASE SUPPORT PAGE, AND MERCHANDISE CATALOG
BROADCAST REQUEST
S409
S410
BROADCASTING CM CONTENTS, MERCHANDISE PURCHASE GUIDE BOOK, MERCHANDISE PURCHASE SUPPORT PAGE, AND MERCHANDISE CATALOG
S413
INCENTIVE FOR RECEPTION (PURCHASE POINT)
S411
RECEPTION
S412
SELECTING MERCHANDISE
S414
ORDER THROUGH INTERNET
S415
ACCEPTING ORDER
S417
DELIVERY OF MERCHANDISE
S416
ADDITION TO CUSTOMER DATA
S420
IMPROVING MERCHANDISE/DEVELOPING NEW MERCHANDISE
S419
ANALYZING DATA
1
S423
DISPLAYING MERCHANDISE
S421
INPUTTING MERCHANDISE DATA INTO PORTABLE TERMINAL
S422
PURCHASING AT RETAIL SHOP
S424
RECEIVING DATA
S418
ANSWERING QUESTIONNAIRE ON PURCHASED MERCHANDISE

FIG. 4

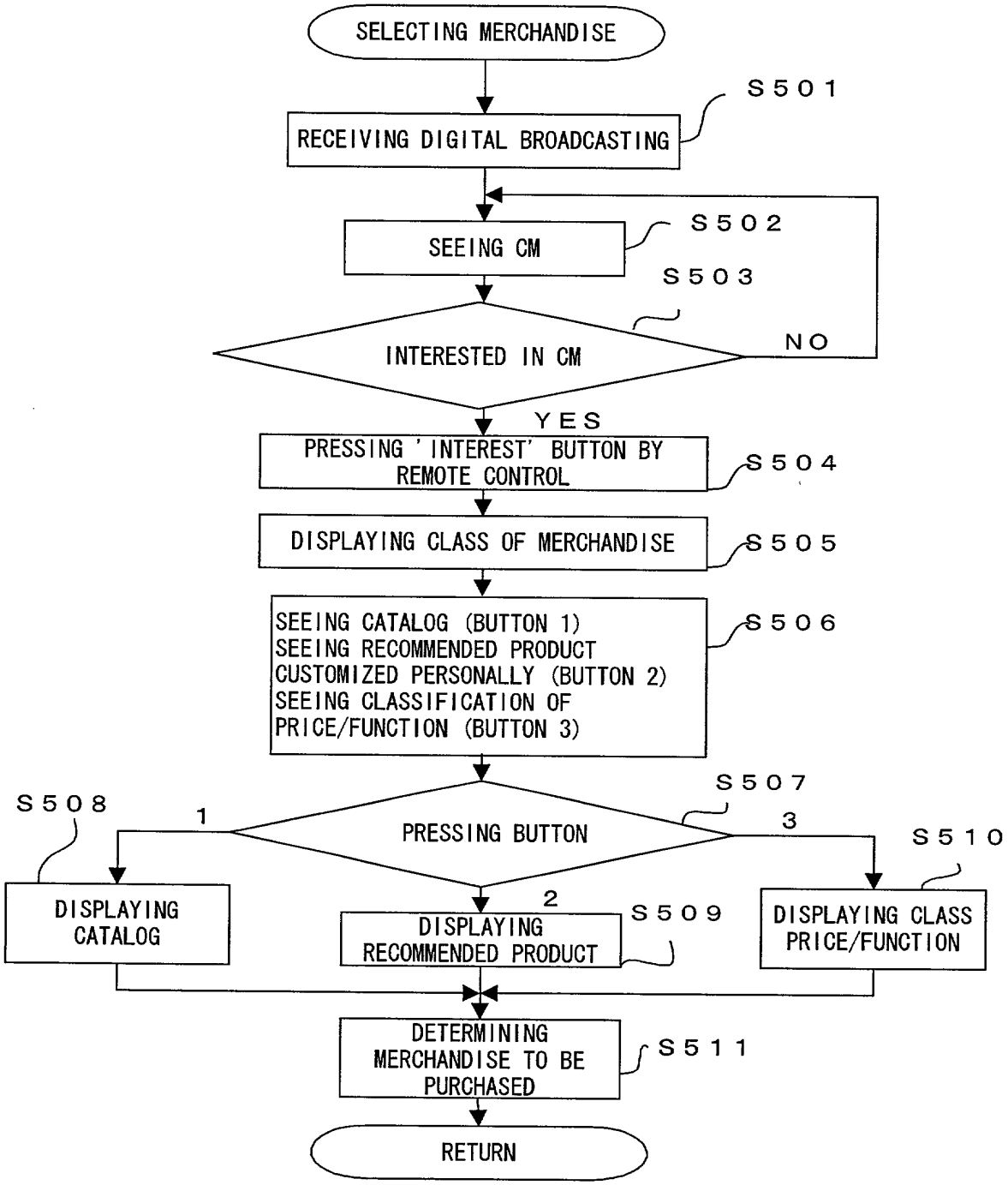

SELECTING MERCHANDISE
S501
RECEIVING DIGITAL BROADCASTING
S502
SEEING CM
S503
INTERESTED IN CM
NO
YES
PRESSING 'INTEREST' BUTTON BY REMOTE CONTROL
S504
DISPLAYING CLASS OF MERCHANDISE
S505
SEEING CATALOG (BUTTON 1)
SEEING RECOMMENDED PRODUCT CUSTOMIZED PERSONALLY (BUTTON 2)
SEEING CLASSIFICATION OF PRICE/FUNCTION (BUTTON 3)
S506
S507
PRESSING BUTTON
1
2
3
S508
DISPLAYING CATALOG
DISPLAYING RECOMMENDED PRODUCT
S509
S510
DISPLAYING CLASS PRICE/FUNCTION
DETERMINING MERCHANDISE TO BE PURCHASED
S511
RETURN

FIG. 5

Attorney Docket No. 05792.0040

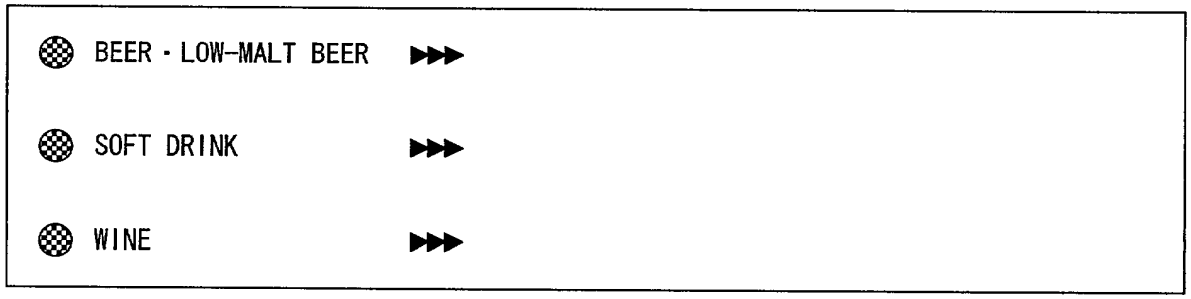


FIG. 6A

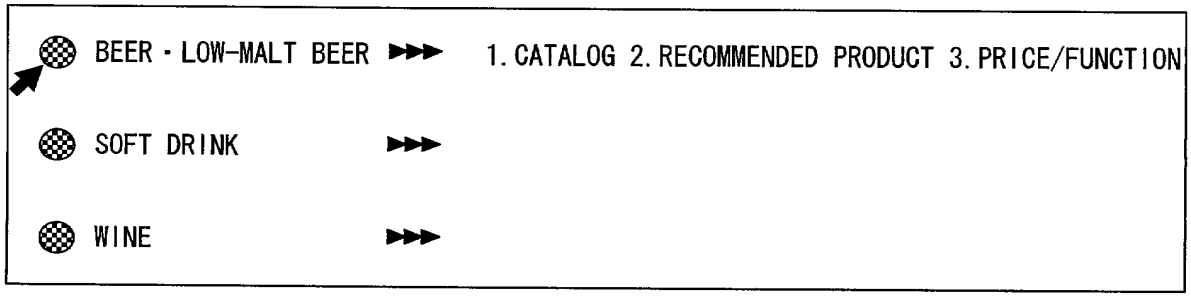


FIG. 6B

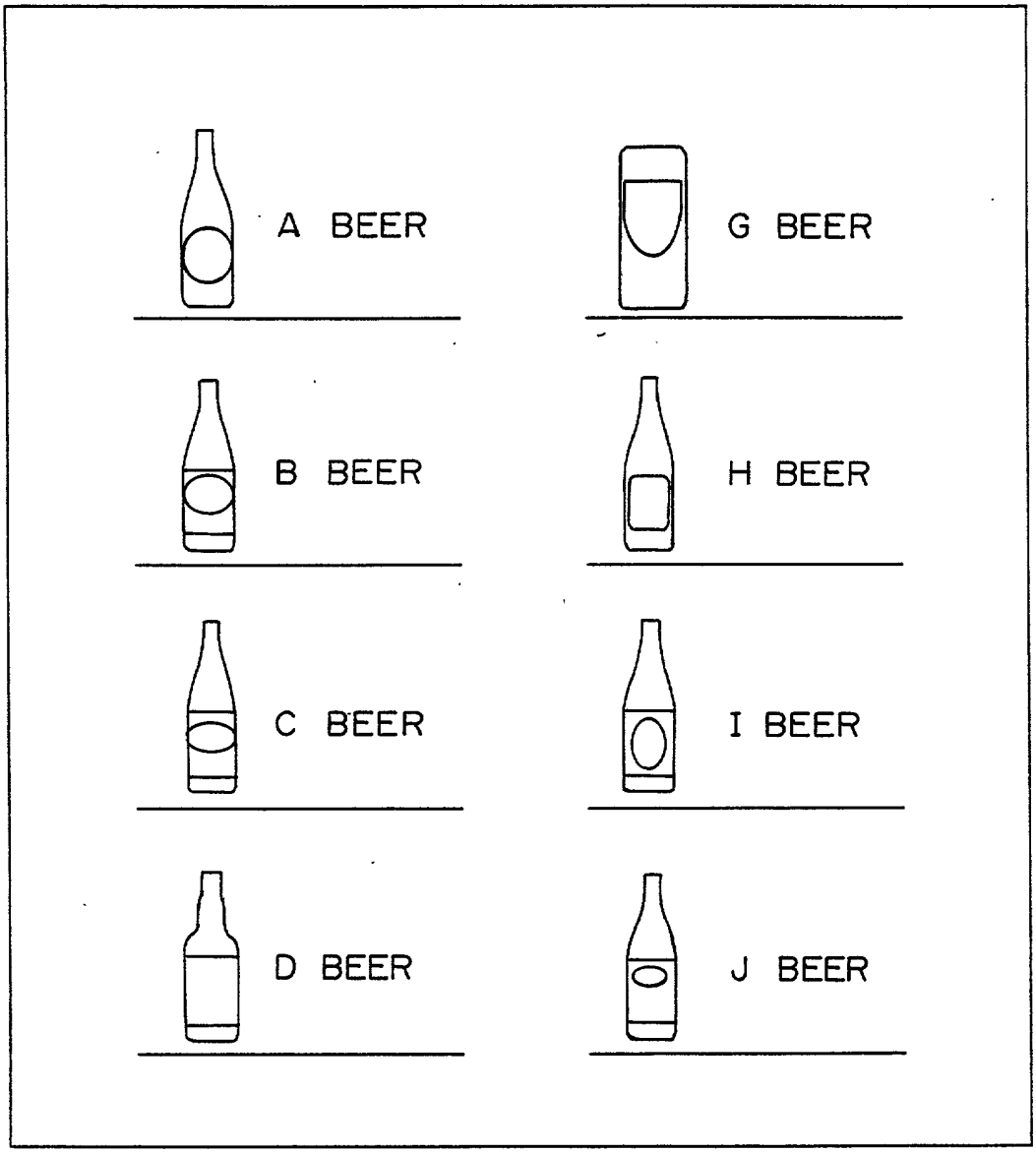


FIG. 7

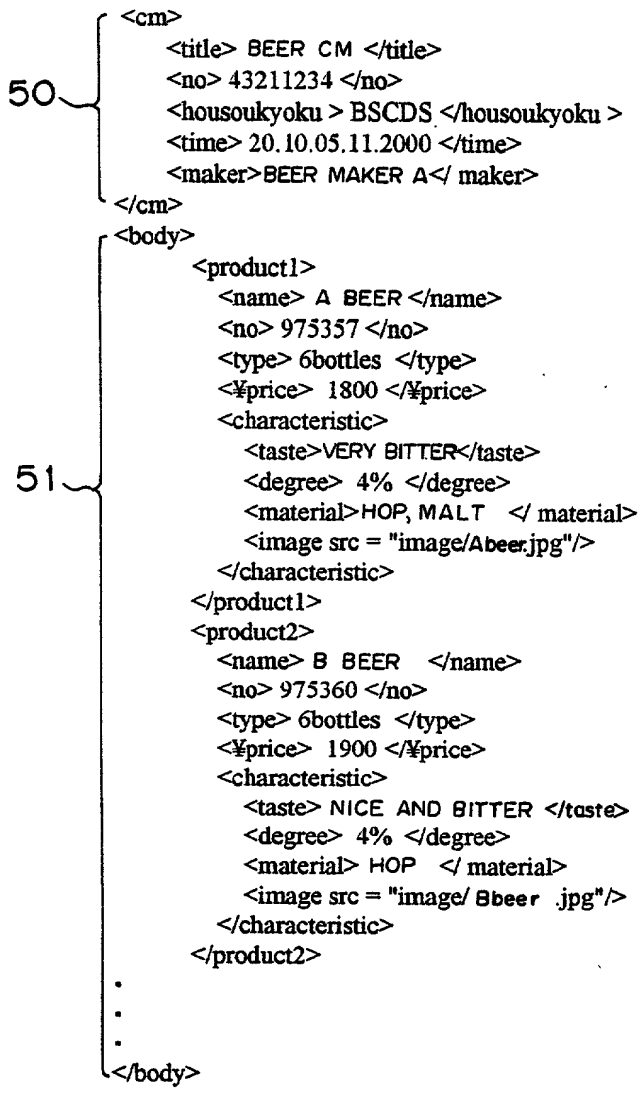

<cm>
<title> BEER CM </title>
<no> 43211234 </no>
<housoukyoku > BSCDS </housoukyoku >
<time> 20.10.05.11.2000 </time>
<maker>BEER MAKER A</ maker>
</cm>
<body>
<product1>
<name> A BEER </name>
<no> 975357 </no>
<type> 6bottles </type>
<¥price> 1800 </¥price>
<characteristic>
<taste>VERY BITTER</taste>
<degree> 4% </degree>
<material>HOP, MALT </ material>
<image src = "image/Abeer.jpg"/>
</characteristic>
</product1>
<product2>
<name> B BEER </name>
<no> 975360 </no>
<type> 6bottles </type>
<¥price> 1900 </¥price>
<characteristic>
<taste> NICE AND BITTER </taste>
<degree> 4% </degree>
<material> HOP </ material>
<image src = "image/ Bbeer .jpg"/>
</characteristic>
</product2>
.
.
.
</body>
50
51

FIG. 8

Patent Application Publication

RECOMMENDED BEER FOR YOU

No. 1 A BEER

TASTE: VERY BITTER
ALCOHOLIC DEGREE: NORMAL
PRICE: 1800 YEN / 6 BOTTLES

No. 2 H BEER

TASTE: STRONG AND BITTER
ALCOHOLIC DEGREE: LITTLE HIGH
PRICE: 2000 YEN / 6 BOTTLES

FIG. 9

1. SELECTING BY PRICE
2. SELECTING BY TASTE
3. SELECTING BY ALCOHOLIC DEGREE
4. SELECTING BY CHECKING ALL TABLES

FIG. 10

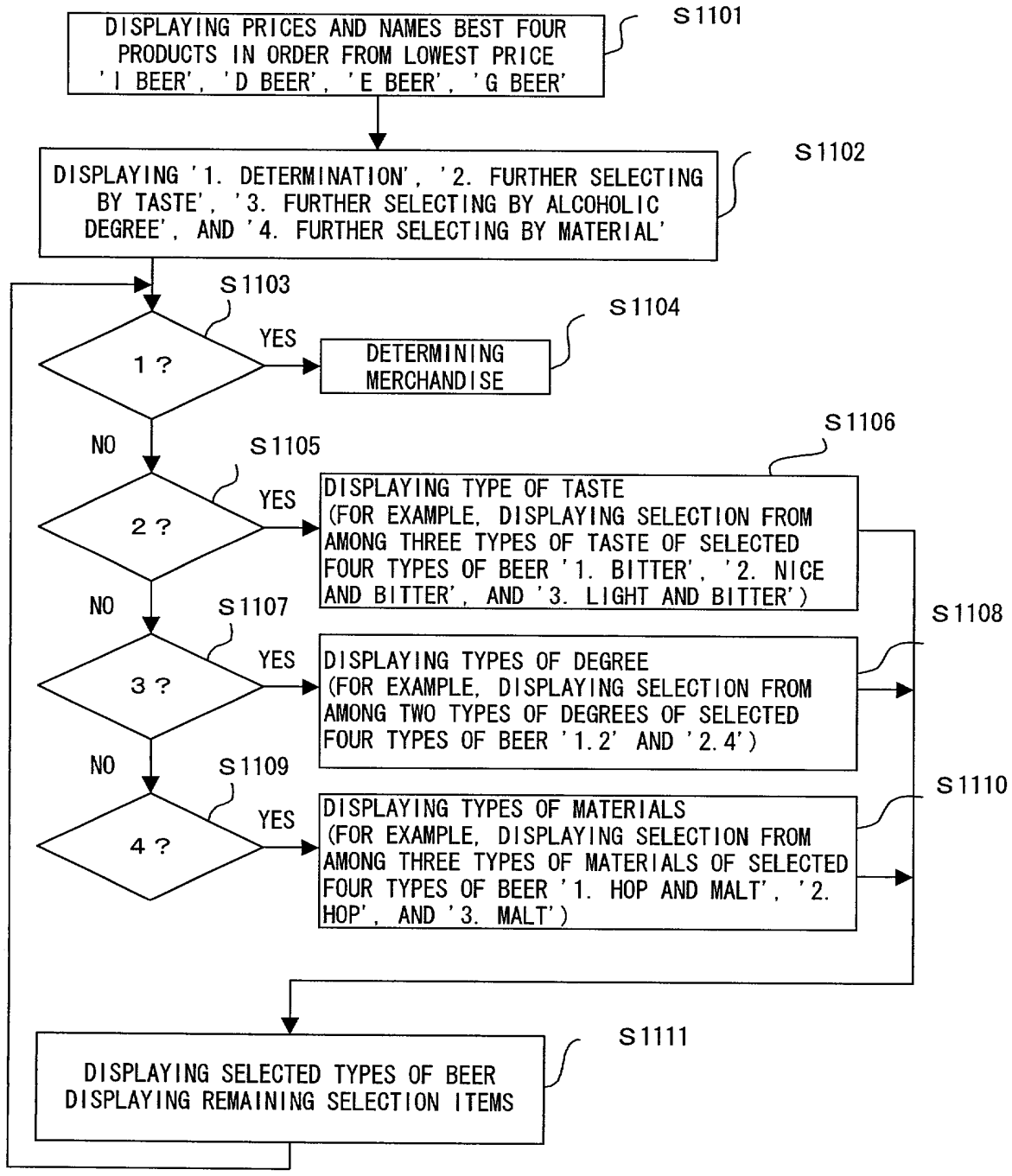

DISPLAYING PRICES AND NAMES BEST FOUR PRODUCTS IN ORDER FROM LOWEST PRICE 'I BEER', 'D BEER', 'E BEER', 'G BEER'
S1101
DISPLAYING '1. DETERMINATION', '2. FURTHER SELECTING BY TASTE', '3. FURTHER SELECTING BY ALCOHOLIC DEGREE', AND '4. FURTHER SELECTING BY MATERIAL'
S1102
S1103
1 ?
YES
DETERMINING MERCHANDISE
S1104
NO
S1105
2 ?
YES
DISPLAYING TYPE OF TASTE (FOR EXAMPLE, DISPLAYING SELECTION FROM AMONG THREE TYPES OF TASTE OF SELECTED FOUR TYPES OF BEER '1. BITTER', '2. NICE AND BITTER', AND '3. LIGHT AND BITTER')
S1106
NO
S1107
3 ?
YES
DISPLAYING TYPES OF DEGREE (FOR EXAMPLE, DISPLAYING SELECTION FROM AMONG TWO TYPES OF DEGREES OF SELECTED FOUR TYPES OF BEER '1.2' AND '2.4')
S1108
NO
S1109
4 ?
YES
DISPLAYING TYPES OF MATERIALS (FOR EXAMPLE, DISPLAYING SELECTION FROM AMONG THREE TYPES OF MATERIALS OF SELECTED FOUR TYPES OF BEER '1. HOP AND MALT', '2. HOP', AND '3. MALT')
S1110
DISPLAYING SELECTED TYPES OF BEER DISPLAYING REMAINING SELECTION ITEMS
S1111

FIG. 11

NAME OF PRODUCT	UNIT PRICE	TASTE	DEGREES	MATERIAL
A BEER	220	VERY BITTER	4	HOP AND MOLT
B BEER	220	NICE AND BITTER	4	HOP
C BEER	230	CLEAR AND BITTER	4	HOP
D BEER	210	BITTER	4	MOLT
E BEER	210	NICE AND BITTER	4	HOP
F BEER	220	VERY BITTER	5	HOP AND MOLT
G BEER	210	LIGHT AND BITTER	2	HOP AND MOLT
H BEER	230	DEEP AND BITTER	5	HOP AND MOLT
I BEER	190	BITTER	4	HOP AND MOLT
J BEER	240	NICE AND BITTER	4	MOLT
K BEER	220	CLEAR AND BITTER	4	MOLT

FIG. 12

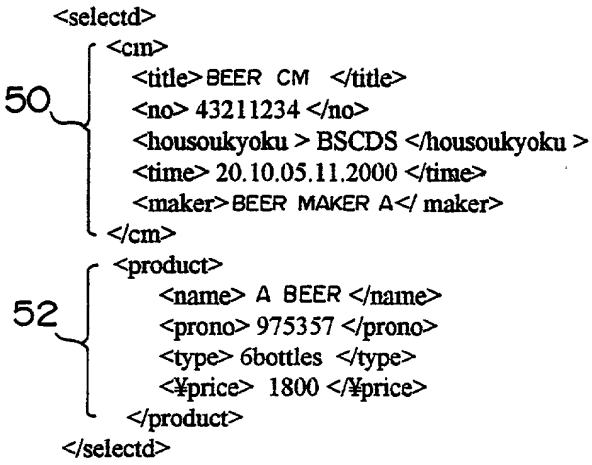
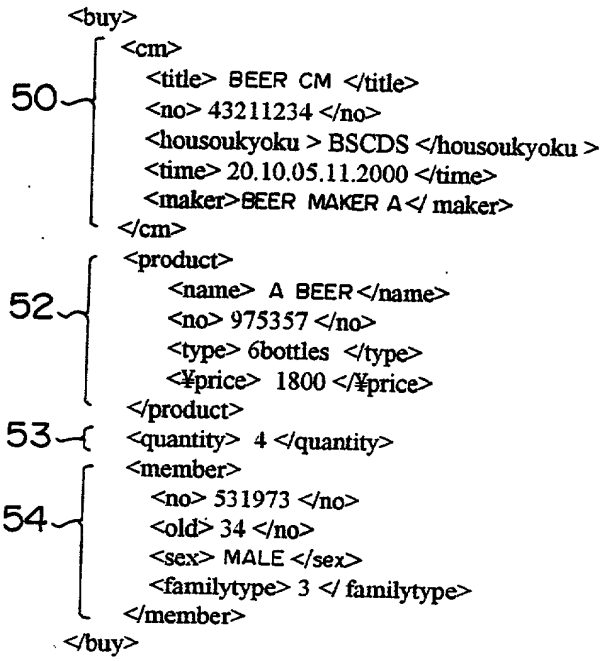

<selectd>
<cm>
<title>BEER CM </title>
<no> 43211234 </no>
<housoukyoku > BSCDS </housoukyoku >
<time> 20.10.05.11.2000 </time>
<maker>BEER MAKER A</ maker>
</cm>
<product>
<name> A BEER </name>
<prono> 975357 </prono>
<type> 6bottles </type>
<¥price> 1800 </¥price>
</product>
</selectd>
50
52

FIG. 13


<buy>
<cm>
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<no> 43211234 </no>
<housoukyoku > BSCDS </housoukyoku >
<time> 20.10.05.11.2000 </time>
<maker>BEER MAKER A</ maker>
</cm>
<product>
<name> A BEER</name>
<no> 975357 </no>
<type> 6bottles </type>
<¥price> 1800 </¥price>
</product>
<quantity> 4 </quantity>
<member>
<no> 531973 </no>
<old> 34 </no>
<sex> MALE </sex>
<familytype> 3 </ familytype>
</member>
</buy>
50
52
53
54

FIG. 14

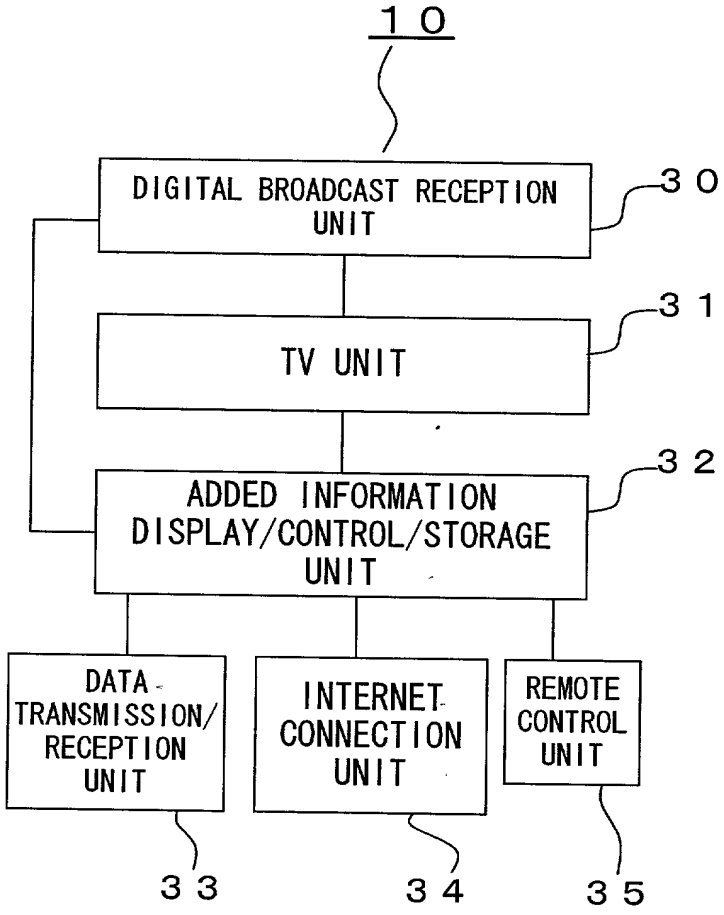
10
DIGITAL BROADCAST RECEPTION UNIT
30
TV UNIT
31
ADDED INFORMATION DISPLAY/CONTROL/STORAGE UNIT
32
DATA TRANSMISSION/ RECEPTION UNIT
INTERNET CONNECTION UNIT
REMOTE CONTROL UNIT
33
34
35

FIG. 15

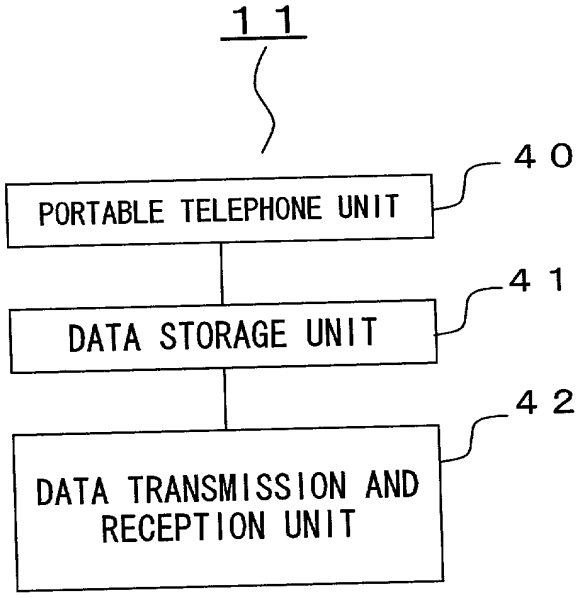

FIG. 16A

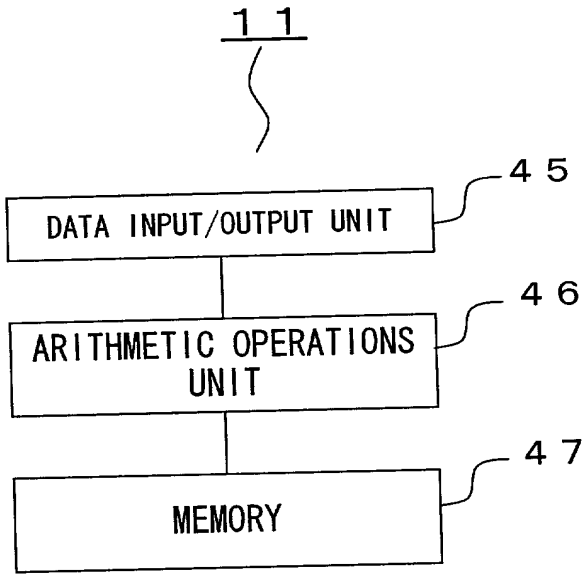

FIG. 16B

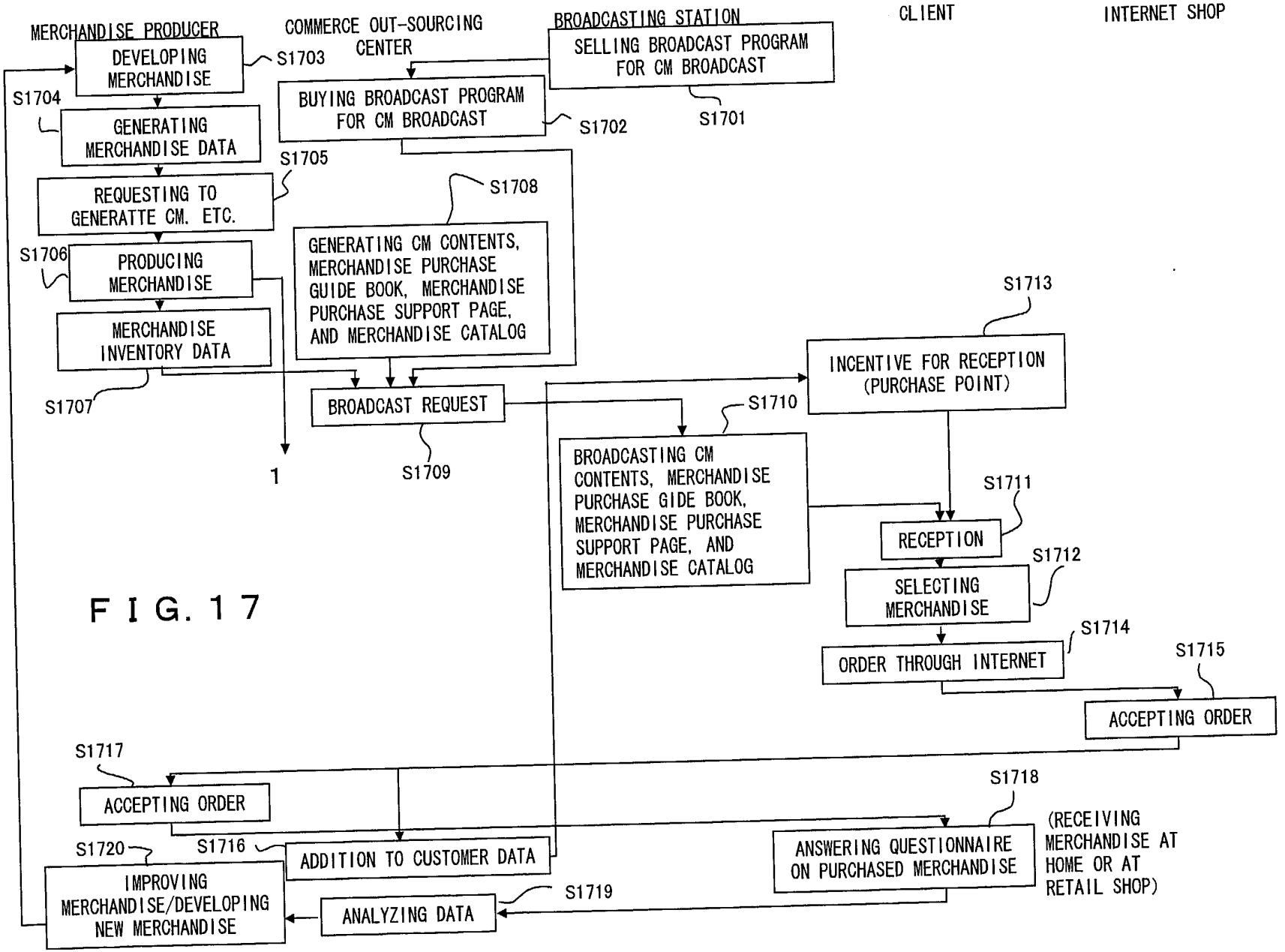
MERCHANDISE PRODUCER
COMMERCE OUT-SOURCING CENTER
BROADCASTING STATION
CLIENT
INTERNET SHOP
DEVELOPING MERCHANDISE
S1703
SELLING BROADCAST PROGRAM FOR CM BROADCAST
S1701
BUYING BROADCAST PROGRAM FOR CM BROADCAST
S1702
S1704
GENERATING MERCHANDISE DATA
S1705
REQUESTING TO GENERATTE CM. ETC.
S1708
GENERATING CM CONTENTS, MERCHANDISE PURCHASE GUIDE BOOK, MERCHANDISE PURCHASE SUPPORT PAGE, AND MERCHANDISE CATALOG
S1706
PRODUCING MERCHANDISE
MERCHANDISE INVENTORY DATA
S1707
BROADCAST REQUEST
S1709
1
S1713
INCENTIVE FOR RECEPTION (PURCHASE POINT)
S1710
BROADCASTING CM CONTENTS, MERCHANDISE PURCHASE GIDE BOOK, MERCHANDISE PURCHASE SUPPORT PAGE, AND MERCHANDISE CATALOG
S1711
RECEPTION
S1712
SELECTING MERCHANDISE
S1714
ORDER THROUGH INTERNET
S1715
ACCEPTING ORDER
S1717
ACCEPTING ORDER
S1718
ANSWERING QUESTIONNAIRE ON PURCHASED MERCHANDISE
(RECEIVING MERCHANDISE AT HOME OR AT RETAIL SHOP)
S1720
IMPROVING MERCHANDISE/DEVELOPING NEW MERCHANDISE
S1716
ADDITION TO CUSTOMER DATA
S1719
ANALYZING DATA

FIG. 17

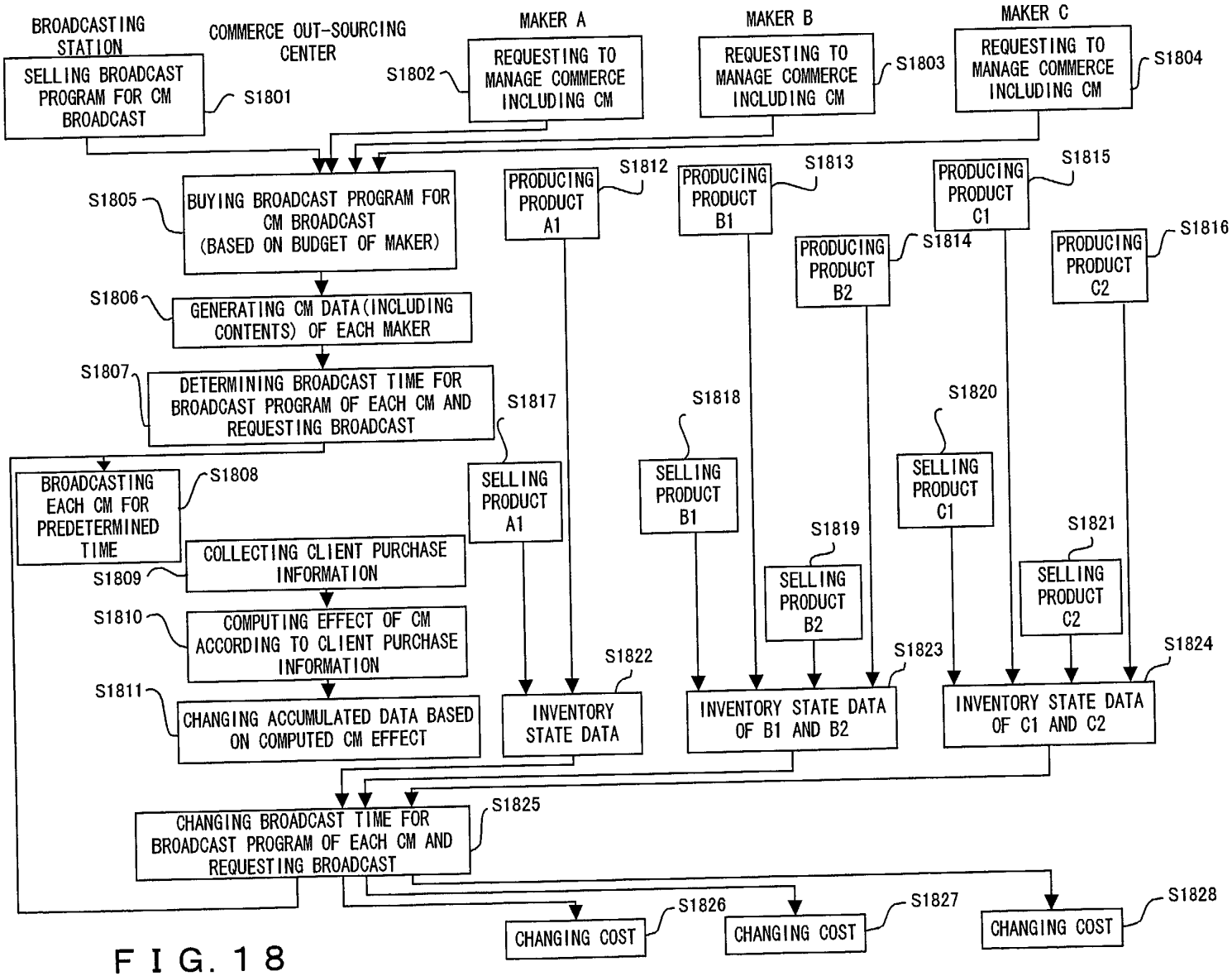
BROADCASTING STATION
SELLING BROADCAST PROGRAM FOR CM BROADCAST
S1801
COMMERCE OUT-SOURCING CENTER
S1802
REQUESTING TO MANAGE COMMERCE INCLUDING CM
MAKER A
S1803
REQUESTING TO MANAGE COMMERCE INCLUDING CM
MAKER B
S1804
REQUESTING TO MANAGE COMMERCE INCLUDING CM
MAKER C
S1805
BUYING BROADCAST PROGRAM FOR CM BROADCAST (BASED ON BUDGET OF MAKER)
S1806
GENERATING CM DATA(INCLUDING CONTENTS) OF EACH MAKER
S1807
DETERMINING BROADCAST TIME FOR BROADCAST PROGRAM OF EACH CM AND REQUESTING BROADCAST
S1808
BROADCASTING EACH CM FOR PREDETERMINED TIME
S1809
COLLECTING CLIENT PURCHASE INFORMATION
S1810
COMPUTING EFFECT OF CM ACCORDING TO CLIENT PURCHASE INFORMATION
S1811
CHANGING ACCUMULATED DATA BASED ON COMPUTED CM EFFECT
PRODUCING PRODUCT A1
S1812
PRODUCING PRODUCT B1
S1813
PRODUCING PRODUCT B2
S1814
PRODUCING PRODUCT C1
S1815
PRODUCING PRODUCT C2
S1816
S1817
SELLING PRODUCT A1
S1818
SELLING PRODUCT B1
S1819
SELLING PRODUCT B2
S1820
SELLING PRODUCT C1
S1821
SELLING PRODUCT C2
S1822
INVENTORY STATE DATA
S1823
INVENTORY STATE DATA OF B1 AND B2
S1824
INVENTORY STATE DATA OF C1 AND C2
S1825
CHANGING BROADCAST TIME FOR BROADCAST PROGRAM OF EACH CM AND REQUESTING BROADCAST
S1826
CHANGING COST
S1827
CHANGING COST
S1828
CHANGING COST

FIG. 18

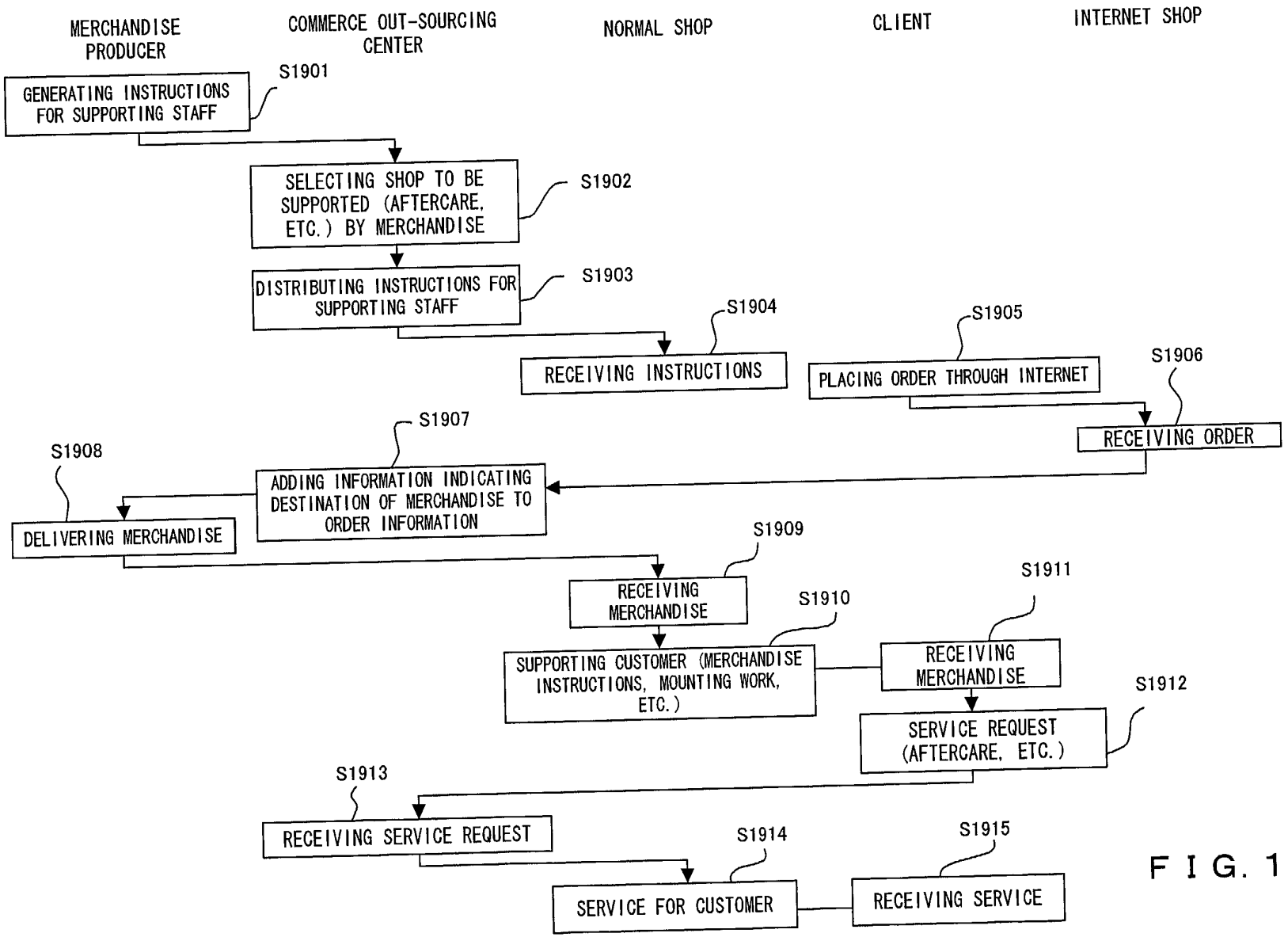
MERCHANDISE PRODUCER
COMMERCE OUT-SOURCING CENTER
NORMAL SHOP
CLIENT
INTERNET SHOP
S1901
GENERATING INSTRUCTIONS FOR SUPPORTING STAFF
S1902
SELECTING SHOP TO BE SUPPORTED (AFTERCARE, ETC.) BY MERCHANDISE
S1903
DISTRIBUTING INSTRUCTIONS FOR SUPPORTING STAFF
S1904
RECEIVING INSTRUCTIONS
S1905
PLACING ORDER THROUGH INTERNET
S1906
RECEIVING ORDER
S1907
ADDING INFORMATION INDICATING DESTINATION OF MERCHANDISE TO ORDER INFORMATION
S1908
DELIVERING MERCHANDISE
S1909
RECEIVING MERCHANDISE
S1910
SUPPORTING CUSTOMER (MERCHANDISE INSTRUCTIONS, MOUNTING WORK, ETC.)
S1911
RECEIVING MERCHANDISE
S1912
SERVICE REQUEST (AFTERCARE, ETC.)
S1913
RECEIVING SERVICE REQUEST
S1914
SERVICE FOR CUSTOMER
S1915
RECEIVING SERVICE

FIG. 19

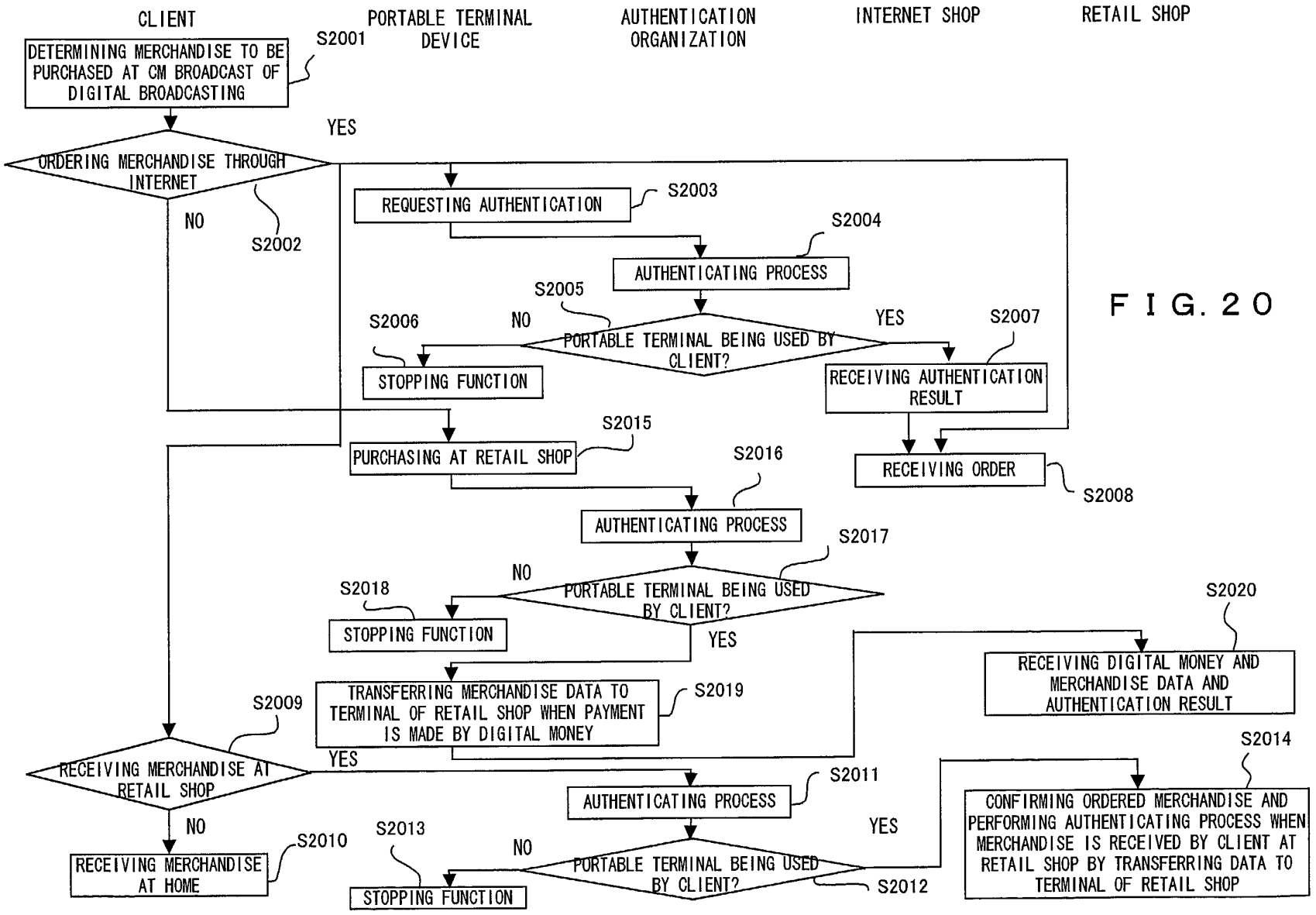
CLIENT
PORTABLE TERMINAL DEVICE
AUTHENTICATION ORGANIZATION
INTERNET SHOP
RETAIL SHOP
DETERMINING MERCHANDISE TO BE PURCHASED AT CM BROADCAST OF DIGITAL BROADCASTING
S2001
ORDERING MERCHANDISE THROUGH INTERNET
YES
NO
S2002
REQUESTING AUTHENTICATION
S2003
AUTHENTICATING PROCESS
S2004
PORTABLE TERMINAL BEING USED BY CLIENT?
S2005
NO
YES
S2006
STOPPING FUNCTION
S2007
RECEIVING AUTHENTICATION RESULT
PURCHASING AT RETAIL SHOP
S2015
RECEIVING ORDER
S2008
AUTHENTICATING PROCESS
S2016
PORTABLE TERMINAL BEING USED BY CLIENT?
S2017
NO
S2018
STOPPING FUNCTION
YES
TRANSFERRING MERCHANDISE DATA TO TERMINAL OF RETAIL SHOP WHEN PAYMENT IS MADE BY DIGITAL MONEY
S2019
RECEIVING DIGITAL MONEY AND MERCHANDISE DATA AND AUTHENTICATION RESULT
S2020
RECEIVING MERCHANDISE AT RETAIL SHOP
S2009
YES
NO
RECEIVING MERCHANDISE AT HOME
S2010
AUTHENTICATING PROCESS
S2011
PORTABLE TERMINAL BEING USED BY CLIENT?
S2012
YES
NO
S2013
STOPPING FUNCTION
CONFIRMING ORDERED MERCHANDISE AND PERFORMING AUTHENTICATING PROCESS WHEN MERCHANDISE IS RECEIVED BY CLIENT AT RETAIL SHOP BY TRANSFERRING DATA TO TERMINAL OF RETAIL SHOP
S2014

FIG. 20

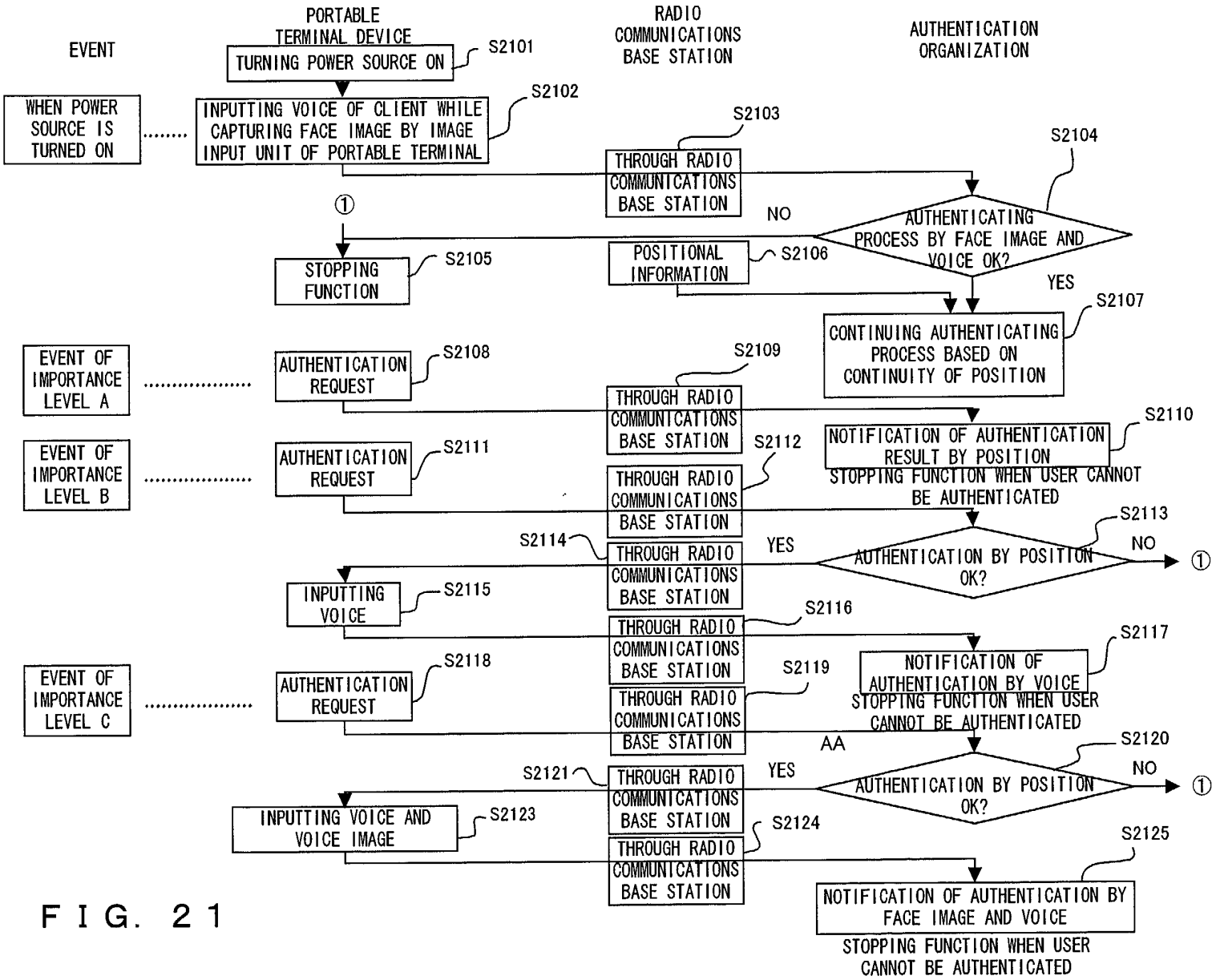
EVENT
PORTABLE TERMINAL DEVICE
RADIO COMMUNICATIONS BASE STATION
AUTHENTICATION ORGANIZATION
TURNING POWER SOURCE ON
S2101
WHEN POWER SOURCE IS TURNED ON
INPUTTING VOICE OF CLIENT WHILE CAPTURING FACE IMAGE BY IMAGE INPUT UNIT OF PORTABLE TERMINAL
S2102
THROUGH RADIO COMMUNICATIONS BASE STATION
S2103
AUTHENTICATING PROCESS BY FACE IMAGE AND VOICE OK?
S2104
NO
①
STOPPING FUNCTION
S2105
POSITIONAL INFORMATION
S2106
YES
CONTINUING AUTHENTICATING PROCESS BASED ON CONTINUITY OF POSITION
S2107
EVENT OF IMPORTANCE LEVEL A
AUTHENTICATION REQUEST
S2108
THROUGH RADIO COMMUNICATIONS BASE STATION
S2109
NOTIFICATION OF AUTHENTICATION RESULT BY POSITION
S2110
STOPPING FUNCTION WHEN USER CANNOT BE AUTHENTICATED
EVENT OF IMPORTANCE LEVEL B
AUTHENTICATION REQUEST
S2111
THROUGH RADIO COMMUNICATIONS BASE STATION
S2112
AUTHENTICATION BY POSITION OK?
S2113
YES
NO
①
THROUGH RADIO COMMUNICATIONS BASE STATION
S2114
INPUTTING VOICE
S2115
THROUGH RADIO COMMUNICATIONS BASE STATION
S2116
NOTIFICATION OF AUTHENTICATION BY VOICE
S2117
STOPPING FUNCTION WHEN USER CANNOT BE AUTHENTICATED
EVENT OF IMPORTANCE LEVEL C
AUTHENTICATION REQUEST
S2118
THROUGH RADIO COMMUNICATIONS BASE STATION
S2119
AA
AUTHENTICATION BY POSITION OK?
S2120
YES
NO
①
THROUGH RADIO COMMUNICATIONS BASE STATION
S2121
INPUTTING VOICE AND VOICE IMAGE
S2123
THROUGH RADIO COMMUNICATIONS BASE STATION
S2124
NOTIFICATION OF AUTHENTICATION BY FACE IMAGE AND VOICE
S2125
STOPPING FUNCTION WHEN USER CANNOT BE AUTHENTICATED

FIG. 21